Introduced by Senator Pavley

(Coauthor: Assembly Member Brownley)

February 27, 2009

An act to add-Sections 387.2 and 399.21 Section 399.24 to the Public Utilities Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

SB 523, as amended, Pavley. Renewable energy resources: feed-in tariff. Solar Feed-in Tariff Pilot Program.

(1) Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations. The Public Utilities Act imposes various duties and responsibilities on the commission with respect to the purchase of electricity by electrical corporations and requires the commission to review and adopt a procurement plan and a renewable energy procurement plan for each electrical corporation pursuant to the California Renewables Portfolio Standard Program. The program requires that a retail seller of electricity, including electrical corporations, purchase a specified minimum percentage of electricity generated by eligible renewable energy resources, as defined, in any given year as a specified percentage of total kilowatthours sold to retail end-use customers each calendar year (renewables portfolio standard).

Existing law requires every electrical corporation to file with the commission a standard tariff for electricity generated by an electric generation facility, as defined, that is owned and operated by a retail customer of the electrical corporation. Existing law requires that the electric generation facility: (1) have an effective capacity of not more

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than 1.5 megawatts and be located on property owned or under the control of the customer, (2) be interconnected and operate in parallel with the electric transmission and distribution grid, (3) be strategically located and interconnected to the electric transmission system in a manner that optimizes the deliverability of electricity generated at the facility to load centers, and (4) meet the definition of an eligible renewable energy resource under the California Renewables Portfolio Standard Program. Existing law requires that the tariff provide for payment for every kilowatthour of electricity generated by an electric generation facility at a market price referent established by the commission pursuant to the program. Existing law requires the electrical corporation to make this tariff available to customers that own and operate an electric generation facility within the service territory of the electrical corporation, upon request, on a first-come-first-served basis, until the combined statewide cumulative rated generating capacity of those electric generation facilities equals 500 megawatts, or the electrical corporation meets its proportionate share of the 500 megawatt limit based upon the ratio of its peak demand to total statewide peak demand of all electrical corporations. Existing law authorizes the commission to modify or adjust the above-described requirements for any electrical corporation with less than 100,000 service connections, as individual circumstances merit. Existing law provides that the electricity generated by an electric generation facility counts toward the electrical corporation's renewables portfolio standard and provides that the physical generating capacity counts toward meeting the electrical corporation's resource adequacy requirements.

This bill would require every electrical corporation with more than 100,000 service connections to develop and, upon approval by the commission, implement a standard-offer contract and feed-in tariff, as defined, that requires the electrical corporation to purchase every kilowatthour of electricity delivered to the grid that is generated by a tariff-eligible generation facility. The bill would require the commission to approve the standard-offer contract and feed-in tariff at a rate and upon those terms that the commission determines are reasonable on a market segment, as specified, and technology specific basis in consideration of certain criteria. Each electrical corporation would be required to obtain commission approval of a standard-offer contract and feed-in tariff by June 1, 2010, and to implement the standard-offer contract and feed-in tariff by July 1, 2010. The bill would authorize an electrical corporation to offer optional alternative standard-offer

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contracts and feed-in tariffs of differing duration upon approval by the commission. The bill would require an electrical corporation to make the standard-offer contract or feed-in tariff available to the owner or operator of a tariff-eligible generation facility on a first-come-first-served basis until the time that 2% of total retail sales of electricity by the electrical corporation is generated by tariff-eligible generation facilities. The bill would require that after June 30, 2014, the commission review the effectiveness of the implementation of standard-offer contracts and feed-in tariffs in advancing specified purposes and would authorize the commission to revise the program as it sees fit for additional tariff-eligible generation facilities. The bill would authorize the commission to modify the above-described requirements for an electrical corporation with less than 100,000 service connections in the state based upon the individual circumstances of that electrical corporation. The bill would provide that every kilowatthour of electricity generated by a tariff-eligible generation facility receiving service pursuant to the standard-offer contract or feed-in tariff count toward meeting the electrical corporation's requirements pursuant to the renewable portfolio standard and the California Global Warming Solutions Act of 2006.

This bill would create the Solar Feed-in Tariff Pilot Program. The bill would require Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas and Electric Company, to enter into agreements to purchase all of the electricity generated by the owner or operator of a solar energy generation facility located within the territory served by that electrical corporation at specified prices using a contract developed by the commission, as provided. This program would be limited to the City of Santa Monica and other pilot cities to be selected by the commission.

Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime. Because this bill would require an order or other action of the commission to implement its provisions and a violation of that order or action would be a crime, the bill would impose a state-mandated local program by creating a new crime. The bill would also create a state-mandated local program by imposing duties on the City of Santa Monica.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

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This bill would provide that with regard to certain mandates no reimbursement is required by this act for a specified reason.

With regard to any other mandates, this bill would provide that, if the Commission on State Mandates determines that the bill contains costs so mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

(2) Under existing law the governing board of a local publicly owned electric utility is responsible for implementing and enforcing a renewables portfolio standard for the utility that recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvement.

This bill would require the governing board of a local publicly owned electric utility with more than 100,000 service connections to develop and implement a feed-in tariff that provides for payment for every kilowatthour of electricity generated by a tariff-eligible generation facility that is delivered to the grid. The bill requires that the tariff price to be paid by the utility be approved by the governing board and be of a duration of not less than 20 years. The bill would authorize the utility to offer optional alternative feed-in tariffs of differing duration and to make the terms of a feed-in tariff available to owners or operators of a tariff-eligible generation facility in the form of a non-negotiable standard-offer contract for a term of 20 years, and any other contract durations determined to be necessary and reasonable by the utility's governing board. The bill would provide that every kilowatthour of electricity generated by a tariff-eligible generation facility receiving service pursuant to the feed-in tariff or contract count toward meeting the utility's renewable portfolio standard and the California Global Warming Solutions Act of 2006. Because the bill would require actions to be undertaken by local publicly owned electric utilities which are entities of local government, the bill would impose a state-mandated local program.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for specified reasons.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

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The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

- (a) It is the policy of the State of California to encourage the rapid and sustainable development of electricity from renewable sources, particularly from smaller, widely distributed solar photovoltaic installations, by the adoption of the Solar Feed-in Tariff Pilot Program created pursuant to this act.
- (b) This act will create green jobs for the state. The German solar energy industry created over 50,000 jobs in less than five years, with the entire renewable energy industry creating as many as 200,000 jobs. Spain boasts 25,000 solar energy workers. Gainesville, Florida, where a solar feed-in tariff program is currently being tested, is experiencing a surge of capital investment in community solar systems and local contractors are hiring.
- (c) The pilot program created pursuant to this act will moderate the near-term impact on ratepayers, while reducing volatility and long-term rates relative to other sources of power.
- (d) The pilot program created pursuant to this act will encourage energy conservation by requiring a separate new meter to measure the amount of solar electricity produced on site, while retaining the meter that measures the total amount of electricity used on site.
- (e) Distributed generation will enhance reliability while maintaining utility profitability.
- (f) Local power generation from renewable energy resources is a clear pathway to energy independence and security for our future.
- (g) Distributed solar installations bring the opportunity for renewable power generation to the local level, avoiding the environmental costs of large-scale, carbon-based, centralized power generation, and reducing a wide range of air pollutants, particularly greenhouse gases.
- (h) This act presents a market mechanism to spur the solar industry within our communities. It provides a simple and transparent means for solar investments to earn reasonable and reliable returns, allowing capital to flow into clean and renewable energy systems in California communities. While initially more expensive, these investments will, in the near future, result in

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sustainable green power sources that will deliver electricity to public utilities at lower energy costs than conventional generation.

- SEC. 2. Section 399.24 is added to the Public Utilities Code, to read:
- 399.24. (a) For the purposes of this section, the following terms have the following meanings:
- (1) "Commissioned" means the first time a solar energy generation facility is put into operation following establishment of operational readiness. Commissioning also includes the modernization of an existing solar energy generation facility, if modernization costs are at least 50 percent of the total estimated cost to build a completely new electrical generation facility at that site, including all building structures and installations required for its operation, as determined by the commission.
- (2) "Electrical corporation," as used in this section, only includes Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas and Electric Company.
- (3) "Pilot city" means the City of Santa Monica and any city located in the state selected by the commission pursuant to a competitive solicitation completed by March 1, 2010, and after notice on the public record.
- (4) "Program" means the Solar Feed-in Tariff Pilot Program created pursuant to this section.
- (5) "Solar energy generation facility" means a facility or device that has the primary propose of collection and distribution of solar energy for the generation of electricity, that meets all of the following requirements:
- (A) Has the capacity to produce at least one kilowatt and not more than 1 megawatt of alternating current rated peak electricity.
 - (B) Is located in a pilot city.
- (C) Does not receive payments pursuant to the California Solar Initiative or any other net-metering program.
 - (D) Is not owned or operated by an electrical corporation.
- (6) "Taxable entity" means an owner or operator of a solar energy generation facility that is not a tax-exempt entity.
- (7) "Tax-exempt entity" means an owner or operator of a solar energy generation facility that is listed under Section 501(c) of Title 26 of the United States Code.
- 39 (b) (1) An electrical corporation shall enter into agreements 40 to purchase all of the electricity generated by the owner or

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operator of a solar energy generation facility located within the territory served by that electrical corporation at the prices set forth in subdivision (h) using the contract developed by the commission pursuant to subdivision (c) on a first-come-first-served basis. Contracts entered into pursuant to this subdivision shall be transferable and may be used as security for loans.

- (2) The owner or operator of a solar energy generation facility shall provide the electrical corporation with whom it intends to enter into an agreement pursuant to paragraph (1) with notice not less than 60 days prior to the solar energy generation facility becoming operational. Once operational, the owner or operator of the facility shall request interconnection with the electrical corporation's distribution system.
- (3) (A) The electrical corporation shall connect a solar energy generation facility to its distribution system upon the terms and conditions set by the commission, but in no case more than 60 days after the request for interconnection pursuant to paragraph (2). The commission shall apply, in a nondiscriminatory manner, established standards for the interconnection of solar energy generation facilities that ensures the reliability of electrical service to all customers, and ensures the safety of customers, grid operator employees, and the general public.
- (B) The electrical corporation shall prepare, publish, and apply transparent, objective, and nondiscriminatory rules for connecting solar energy generation facilities to its distribution system.
- (C) If the electrical corporation does not provide interconnection within the 60-day timeframe established pursuant to subparagraph (A), the electrical corporation shall begin payments pursuant to paragraph (1) on day 61 and thereafter. The payment amounts shall be based on the nameplate capacity that the solar energy generation facility could provide if connected to the distribution system.
- (D) All costs associated with the interconnection of solar energy generation facilities, including direct interconnection costs, distribution system enhancements, and electrical corporation compliance costs, shall be paid by the electrical corporation, and included among the costs that the commission shall consider under paragraph (3) of subdivision (c) for cost recovery from ratepayers.

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(4) Ratepayers receiving assistance pursuant to the CARE program established pursuant to Section 739.1 shall be exempt from any above market rates, as determined by the commission.

- (c) (1) The commission shall develop a standard contract of 20 years duration to be used for all payments made pursuant to subdivision (b). The contract shall be written in simple, clear language and shall specify both of the following:
 - (A) The price to be paid for each kilowatt-hour generated.
- (B) That the owner or operator of the solar energy generation facility must sell, and the electrical corporation must purchase, all of the solar energy generated by the solar energy generation facility.
- (2) The commission may adjust the amounts set forth in subdivision (h) no more than once every two years. The commission shall annually review the amounts taking into consideration the ability of these amounts to successfully encourage the installation of solar energy generation facilities and taking into consideration any changes in any of the following:
- (A) Actual average system costs and the production of each type and size of solar energy generation facility.
 - (B) Inflation and interest rates.
- (C) The return achieved by the owners or operators of the solar energy generation facilities and the electricity rates paid by ratepayers.
- (3) In all ratesetting proceedings, the commission shall consider all of the costs incurred by an electrical corporation pursuant to this section in the same manner that the commission considers all of the electrical corporation's other costs. These costs shall be reduced by the value of the renewable energy credits received by the electrical corporation pursuant to subdivision (f).
- (4) The commission shall ensure that no more than 100 megawatts of alternating current rated peak electricity statewide is subject to the requirements of this section.
- (d) The commission shall assign administrative responsibilities for the pilot program in the City of Santa Monica to the City of Santa Monica's Solar Santa Monica Program, and for other pilot programs to other qualified administrators nominated by the cities in which the other pilot programs take place. The commission shall require the electrical corporation to collaborate with the pilot city to ensure that electricity is being distributed pursuant to this

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program by July 1, 2010. A pilot program shall ensure all of the following:

- (1) A simple, clear application form for solar energy system operators or owners requiring identification of the solar energy generation facility owner and the installer, and the precise location, type, and size of the facility.
 - (2) Applications are processed in less than 30 days.

- (3) Solar energy generation facilities are commissioned within one year after their application is approved.
- (4) No system inspection is required beyond what is required by existing law.
- (5) The installation and use of a separate, dedicated meter to measure the production of solar energy facilities operating pursuant to this section, and requiring electrical corporations to read that meter at no cost to the owner or operator of the solar energy generation facility.
- (e) (1) A program administrator and electrical corporation shall provide the commission with any information that may be relevant to the commission's performance of its duties under this section, including, but not limited to, assessment of project development costs, equipment costs, electricity production costs, interconnection costs, automatic rate adjustments, compliance costs, capacity installed, and the amount of electricity generated. The commission shall create a simple form to collect this information.
- (2) The program administrator and the electrical corporation within that city shall jointly prepare an annual report describing and summarizing the success the program in that city.
- (3) The commission shall biennially submit a report to the Legislature and the Governor on the implementation of this section that shall include, but not be limited to, all of the following:
- (A) The generation capacity of new solar energy generation facilities installed in the City of Santa Monica and other pilot cities and the environmental effects of the addition of those facilities.
- (B) The capability of the program in delivering the solar energy generation required under the California Renewables Portfolio Standard Program and other renewable energy objectives.
 - (C) Actions taken by the commission to implement this section.
 - (D) Revisions to the amounts set forth in subdivision (h).

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1 (E) The impact of the implementation of this section on electrical 2 rates.

- (F) Recommendations for changes to this section, if any, that may be necessary or advisable, including whether the provisions of this section should be expanded to other cities or adopted statewide.
- (f) All electricity purchased pursuant to this section may be counted toward the electrical corporation's renewable portfolio procurement requirements and may earn emission reduction credits for that electrical corporation.
- (g) It is the intent of the Legislature that this section be implemented in a manner that does not reduce, impede, or conflict with the California Renewables Portfolio Standard Program or the California Solar Initiative.
- (h) The price of electricity under an agreement entered into pursuant to this section shall be as follows:

18 Taxable Entity *Tax-exempt Entity* 19 Pacific Gas and Electric Company 20 Less than 10 kilowatts \$0.374 \$0.534 21 10 to 100 kilowatts \$0.347 \$0.495 22 Over 100 kilowatts \$0.306 \$0.437 23 San Diego Gas and Electric Company 24 Less than 10 kilowatts \$0.326 \$0.466 25 10 to 100 kilowatts \$0.312 \$0.440 26 Over 100 kilowatts \$0.292 \$0.416 27 Southern California Edison 28

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Less than 10 kilowatts

10 to 100 kilowatts

Over 100 kilowatts

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> SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution for certain costs that may be incurred by a local agency or school district because, in that regard, this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIIIB of the California Constitution.

\$0.320

\$0.294

\$0.237

\$0.458

\$0.420

\$0.339

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However, if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

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All matter omitted in this version of the bill appears in the bill as introduced in Senate, February 27, 2009 (JR11)